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Amendments to the Specification

Please replace paragraph [0014] of the as-filed specification with the re-written paragraph provided below.

/h1/ [0114] ~~[0014]~~ About 93.5 grams of a type F fly ash ground to an average size of about 1.3 microns was mixed with about 5 grams of solid sodium hydroxide (flakes), about 1.5 grams of a commercial grade silicon carbide, and about 37.4 ml of water. The composition of the fly ash is given in ~~Table 1~~ Table 12A. The mixture was blended into a homogeneous slurry, poured into a flat dish and allowed to solidify at room temperature for about 5 minutes. The resulting product was further dried at about 50°C for about 20 hours, after which it was ground and sieved to obtain powders within a size range of about 106 to 180 microns. In the next step, the powders were fed into a vertical heated tube furnace at an approximate feed rate of about 0.14 grams/min. The gas flow inside the tube furnace ~~is~~ was about 1 litre of air plus 3 litres of nitrogen per minute. The constant temperature zone of the furnace was adjusted to provide residence times from less than a second to approximately a few seconds at the peak firing temperatures. The foamed microspheres were collected on a funnel shaped collecting device covered with a fine mesh screen positioned at the bottom part of the furnace. A mild suction was applied to the end of the funnel to aid in collecting the microspheres. The products were characterized for particle density (e.g. apparent density), percent of water floatation, and approximate particle diameter distribution. The results for various firing temperatures and residence times are summarized in Table 12B ~~Table 12~~. FIGS. 15 and 16 show the cross section of the products.

~~Table 12.~~ Table 12A

LOI	SiO_2	Al_2O_3	Fe_2O	CaO	MgO	SO_3	Na_2O	K_2O	TiO_2	Mn_2O_3	P_2O_5	Total
0.40	61.53	17.91	4.72	7.30	2.91	0.40	2.16	1.39	0.86	0.08	0.28	99.94

All amounts are in percentage of weight

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~~Table 12.~~ Table 12B

Temperature (degree C)	Residence time (second)	Apparent density (g/cm^3)	Water float	Size of microspheres (micron)
1400	0.6-1.1	0.52	83	
1300	0.6-1.1	0.49	96	130-280
1250	0.6-1.1	0.58		105-220

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Please replace paragraph [~~0016~~ 0116] of the as-filed specification with the re-written paragraph provided below.

/hl/

[0116]

--~~[0016]~~ About 93.8 grams of a type F fly ash ground to an average size of about 1.3 microns was mixed with about 5 grams of solid sodium hydroxide (flakes), about 0.2 grams of a commercial grade silicon carbide, about 1 gram of commercial grade carbon black, and about 37.5 ml of water. The composition of the fly ash is given in Table 2. The mixture was blended into a homogeneous slurry, poured into a flat dish and allowed to solidify at room temperature for about 5 minutes. The resulting product was further dried at about 50°C for about 20 hours, after which it was ground and sieved to obtain powders within a size range of about 106 to 180 microns. In the next step, the powders were fed into a vertical heated tube furnace at an approximate feed rate of about 0.14 grams/min. The gas flow inside the tube furnace ~~is~~ was about 1 litre of air plus 3 litres of nitrogen per minute. The constant temperature zone of the furnace was adjusted to provide residence times from less than a second to approximately a few seconds at the peak firing temperatures. The foamed microspheres were collected on a funnel shaped collecting device covered with a fine mesh screen positioned at the bottom part of the furnace. A mild suction was applied to the end of the funnel to aid in collecting the microspheres. The products were characterized for particle density (e.g. apparent density), percent of water floatation, and approximate particle diameter distribution. The result is summarized in Table 12C ~~Table 13~~. FIG. 17 shows the cross section of the product.